# **TA-DL100**

### **SERVICE MANUAL**

US Model Canadian Model



### **SPECIFICATIONS**

### **AUDIO POWER SPECIFICATIONS**

POWER OUTPUT AND TOTAL HARMONIC DISTORTION: With 8 ohm loads both channels driven, from 20 - 20,000 Hz; rated 40 watts per channel minimum RMS power, with no more than 0.1% total harmonic distortion from 250 milliwatts to rated output.

### Converter section

D/A converter sampling

frequency D/A conversion 44.1 kHz 8 fs 16 bit

### General

Power output

40 W + 40 W

Total harmonic distortion

Residual noise

(8 ohms 20 Hz - 20 kHz)

Less than 0.08% Less than -50 dBs

Tone controls

(8 ohms.network A) Bass: ± 8 dB (100 Hz)

Treble: ± 8 dB (10 kHz) 150 mV

Sensitivity (TV/AUX) Impedance (TV/AUX)

50 kilohms

Power requirements Power consumption 120 V AC, 60 Hz 105 watts

**Dimensions** 

430 × 110 × 265 mm  $(17 \times 4^{3}/8 \times 10^{1}/2 \text{ in.})$ 

Weight

5.2 kg (11 lb 8 oz)

### **Supplied Accessories**

F-type connector (2) Mini DIN cable (male/male) (1) (5 m/16 ft. 3 in.)

### **Accessories Not Supplied**

Intelligent remote commander RM-P1 Wireless remote control receiver RMR-3030K Mini-DIN 6-pin cable (male/male) RK-MD3035 (5 m), RK-MD3030 (10 m)

Connector wall unit (coax/coax) PC-3030

(DIN/DIN)

Design and specifications subject to change without notice.



DIGITAL LINK™ DECODER AMPLIFIER SONY

### SAFETY CHECK-OUT (US Model)

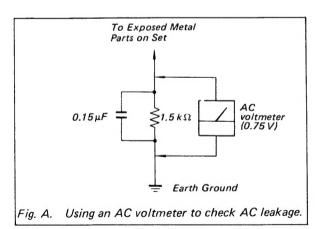
After correcting the original service problem, perform the following safety check before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

### LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

- A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
- 2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
- 3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)



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### **SECTION 1 GENERAL**

Audio connecting cord (not supplied)

to LINE IN

This section is extracted from instruction manual.

# Digital Link™ Decoder Amplifier, TA-DL100 to PRE OUT

You can connect this amplifier with another power amplifier to supply more power or signal processing. The diagram below shows how to connect another amplifier.

To Connect with Another Amplifier

To Connect with a Wireless Remote Control Receiver

**Optional Connection** 

Digital Link™ Decoder Amplifier, TA-DL100

TA-DL100, rear panel

By connecting this digital link room kit with a wireless remote control receiver (RMR-3030K, not supplied), you can have installed the digital link touch panel out of sight or in such a way as to be hidden from view.

The diagram below shows how to connect the remote operate the system with a remote commander even if you

control receiver with the amplifier.



# eceiver, RMR-3030 Wiress remote con

Dignital Link" Decoder Amplifier, TA-DL100 to RMR IN

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⊡.

TA-DL100, front panel 000 [1] RF OUT (TV) Jack To connect with the television set S

To connect with the wireless remote control receiver

§ RMR IN Jack

To allocate an identification number to each digital link

[4] ROOM NUMBER identification switch

To connect with the Digital Link<sup>TM</sup> Touch Panel

3 TO DST TOUCH PANEL jack

To connect with the signal combiner

[2] RF IN jack

[6] TV/AUX IN jacks
To connect with the television set or audio equipment such as a CD player or a tape deck

To control the bass and treble level [7] TONE control dials

[9] SPEAKER jacks To connect with speakers

To connect with another amplifier

8] PRE OUT jacks

[19] Power indicator Lights when power is supplied to the unit.

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# Overview of the Digital Signal Transfer<sup>TM</sup> (DST) System

The DST transmits up to 3 digital audio signals, 1 analog audio video signal and remote control signals through a 75-ohm coaxial cable\*. This system consists of the following

Master digital control center: transmits audio, video and remote control signals.
Digital Link\*\* Decoder Amplifer: decodes audio and remote control signals transmitted from the master digital control center and transmits a remote control signal.

hardware systems.
The following configuration shows the signal transmission in the DST system. Transmitting audio signals digitally assures high quality sound, without experiencing the type of degradation, distortion or signal loss associated with conventional

75-ohm coaxial cable is a common shielded antenna wire and used as medium carrier.

Antenna source signal Remote control signal Analog video and audio signals Digital audio signal RF signal

RM-P1 Remote RM-P1 Remote Comr RMR-TP1 Digital Link™ Touch Panel RMR-TP1 Digital Link<sup>118</sup> Touch Panel TA-DL100 Digital Link<sup>14</sup> Decoder Amplifier TA-DL100 Digital Link<sup>TM</sup> Decoder Amplifier TA-DL100 Digital Link<sup>1M</sup> Decoder Amplifier Watching a TV program Watching a video tape (VIDEO 2) Listening to a cassette tape (TAPE 1) Listening to a CD (CD 1) Digital link room 1 Digital link room 2 Digital link room 3 Digital link room 4 MX-RF1 signal combiner TA-DM1000ES master digital control center Power amplifier CD player Tuner Tape deck LD player 💠 Watching an LD (VIDEO 2) Tape deck VCR ğ o CD player RM-P1 Remote Commander **∞ ⊕** 0 0

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# SECTION 2 MICROCOMPUTER SPECIFICATIONS

### IC701 M50951-112SP

Pin No.	Pin Name	1/0	Description			
1	SEL	0	[H]: AUX, TV INPUT SELECT [L]: DAC OUTPUT SIGNAL SELECT			
2	ATT20	0	[H]: 20dB MUTE [L]: MUTE CANCEL			
3	TXD	0	Outputting the serial signal to RMR-TP1.			
4	RXD	I	Inputting the serial signal from RMR-TP1.			
5	TOPT	I	SERIAL DATA write REQ signal sent to CXD2902.			
6	SIRCS	I	Input the SIRCS signal,			
7	CLK2	0	Outputting the data transfer CLK for writing in the CXD2902.			
8	SOUT2	0	Outputting the serial data writing in the CXD2902.			
9	P. D.	I	Pull Down			
10	RES	I	Inputting the power ramp up signal, [H]: AC ON [L]: AC OFF			
11	CLK1	0	Outputting the CLK for writing from CXD2902,			
12	P. D.	Ι	Pull Down			
13	SIN1	I	Inputting the serial data from CXD2902.			
14	ERR	I	Inputting the ERR signal from CXD2902.			
15	PSW	I	Pull Up. Inputting the power SW. (Not used)			
16	GFS	I	When set for "H" for more than 20msec continuously, muting is set. When switched to "L", muting is canceled.			
17	ЕМРН	I	Input the emphasis.			
18	REQ	I	Inputting the 1-byte data transfer REQ to CXD2902 is input.			
19	TOPR	I	Inputting the serial data read REQ from CXD2902.			
20	CNVss	I ·	GND			
21	RESET	I	Input the MICON RESET. [L]: REST [H]: CANCEL			
22	Xin	I	Input the SYSTEM CLOCK (8MHz)			
23	Xout	0	Output the SYSTEM CLOCK.			
24	Xcin	I	Pull Down			
25	Xcout	◎.	Not connect			
26	Vss	I	GND			
27	φ	0	TIMING OUTPUT (Not used)			
28	ROOM3	I	Inputting the room number.			
29	ROOM2	I	Inputting the room number,			
30	ROOM1	I	Inputting the room number.			
31	ROOM0	I	Inputting the room number.			
32	Vp	I	GND			
33	MUTE	0	MUTING SIGANL, [H]:ON [L]:OFF			
34	XLT	0	Serial set signal.			
35	CLK	0	Serial set signal.			
36	DATA	0	Serial set signal,			

Pin No.	Pin Name	1/0	Description			
37	NC	0	Not used.			
38	LATCH	0	Serial set signal.			
39	SHIFT	0	Serial set signal.			
40	ATT	0	Serial set signal,			
41	NC	0	Not used,			
42	SLED	0	Outputting the SIRCS received LED display.			
43	NC	0	Not used,			
44	NC	0	Not used.			
45	XRST	0	Signal processer IC, RESET output. [H]: RESET CANCEL [L]: RESET			
46	CE	0	Serial set signal,			
47	CLKV	0	Serial set signal,			
48	DT	0	Serial set signal.			
49	PSK2	0	Channel select signal.			
50	PSK1	0	Channel select signal,			
51	RY	0	Power relay ON/OFF. [H]:ON [L]:OFF			
52	Vcc	I	+5V Input			

### IC702 CXD-2902

Pin No.	Pin Name	1/0	Description
1	TDMI	I	Must be connected with the TDMG output (2 pin). This terminal sets SDAT output (64 bits) to "active" only at each room no. timing.
2	TDMG	0	Switches to "L" (active) for 1/16 of 100msec, only at the timing assigned to each room no.
3	EDAT	I	Switches to "active" only when SP (37 pin) is set for "L". As this terminal is not in use during normal operation, it should be fixed to "L" or "H".  When NR is input to this terminal with SP (37 pin) set for "H", the NR is bi-phase modulated. (Input timing must be synchronized with clocks for BCK1 (10 pin) and BCK2 (7 pin).
4	BIDT	0	Not used,
5	SYS1	0	R1 output of the read counter for the RAM, This terminal is not normally used. (But used for monitor,)
6	PBK2	0	2BCK output among clocks reproduced from the bi-phased data which is input from BIPH (60 pin). This terminal is not normally used. (But used for monitor.)
7	BCK2	I	Must be connected with PBK2 (6 pin) for the reproduction clock for creating the W pulse for the RAM.
8	SYC0	0	Outputs the sync pattern for bi-phase remodulation, But the sync is not used as it is output.
9	PBCK	0	Outputs reproduction clock BCK which was remodulated from the data input from BIPH (60 pin).
10	BCK1	I	Normally, this is connected with PBCK (9 pin), Generates the basic CLK for data read and write.  BCK data n n+1 Phase relationship between the data and BCK.
11	ВСК0	0	4BCK which is 4-times the reproduction CLK is remodulated with bi-phase, 40,96kHz. Normally not in use.
12	вск3	0	1/16×1/2 of 10.48576MHz of master. 32BCK=327.68kHz. Normally not is use.
13	WIN	I	Used for inputting W pulse for the built-in RAM. Switches to the input enable state only when SP (37 pin) is set for "H". This should be set for either "L" or "H" during normal use.
14	Т1	7	Set for "L" during normal use. This enables to skip the division ratio of the
15	Т2	I	master by 1/16 unit, This is mainly used for LSI test.
16	GND		
17	MTST	I	Set for "L" during normal use. When this is switched to "L", the RAM $(1 \times 1k \times 2)$ can be used as $(4 \times 256 \times 2)$ . This is mainly use for LSI test.
18	XI	I	Chaptel confliction with Name II and the confliction of the conflictio
19	XO	0	Crystal oscillation pin. Normally oscillates at 10.48576MHz, 1M Ω, 22PFX2.
20	S102	0	Indicates the SYNC position for the top 4 bits of a 1024 bit unit. Normally used for CRC PR. Same as above. (Both E/D is normally connected with SYNC (21 pin). $1024 \times 1$ .
21	SYNC	I	Indicates the top of 1024×1 block. Normally connects with 20 pin (S102).

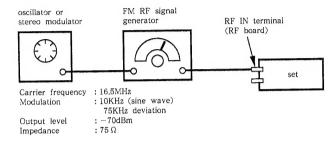
Pin No.	Pin Name	1/0	Description
22	CRC1	0	Outputs clocks which latch errors in the $64{\times}16$ blockes. Nomally connects with ERCK (25 pin).
23	ERCK	I	ERCK(23 pin)accept input independently from external devices only when SP(37 pin) is set for "H". This terminal is connected with CRC1 during normal use.
24	CLR9	0	
25	CL11		
26	DOR A		
27	D1RB	] ,	Connect to the select SW (HEX) of the corresponding room no. Normally pulled up with $100k\ \Omega$ . The input is inverted and then decoded, 26 pin is assigned for the LSB
28	D2RC	I	side,
29	RD	1	
30	ED	I	Set for "L" during encoding and set to "H" during decoding, (mode switching,)
31	LOAD	I	Test terminal, Fixed to "H" during normal use,
32	Vcc		Power terminal (+5V),
33	EX	I	Expansion terminal and fixed to "L" during normal operation.
34	MS1	I	Expansion terminal and fixed to "L" during normal operation,
35	CWEE	0	Monitor terminal for testing, Open during normal operation,
36	SDIN	I	Test terminal, Fixed to "L" during normal operation,
37	SP	I	Test terminal, Fixed to "L" during normal operation.
38	ABSL	0	Monitor terminal for testing, Open during normal operation, Outputs 100Hz signal,
39	RESET	I	Input the RESET signal for reading the built-in RAM, Normally this terminal is connected with 40 pin,
40	CLERW	0	Output one-cycle signal for writing the built-in RAM, Normally this terminal is connected with 39 pin, Can be used as timing signal for reception microprocessor,
41	CLERE	0	Must be "open" as it is not in use for normal operation.
, 42	CLR	I	Must be connected with a 43 pin connector during normal use.
43	SYC1	0	Outputs SYNC, Normally connects with 42 pin connector,
44	ERR	0	Error detection of the reception data, Switches to "H" when an error is detected. This is normally connected with the microprocessor.
45	MRCK	I	
46	D	I	Input for the built-in CRC checker. It is normally connected with 47 pin.
47	DOUT	0	Output for the built-in RAM, It is normally a 46 pin connection. Transmits the output to the reception microprocessor.
48	GND	I	GND terminal.
49	SLOE	0	Normally not in use, must be "open".
50	DIN	I	Input 4 bit data for the PBDT which has been released from bi-phase sent from RF. (Input for the built-in RAM terminal)
51	PBDT	0	Used to remodulate and output the bi-phase data.
52	CWEO	0	Normally not in use and set for "open".
53	SUBS	0	Normally not in use and set for "open".
54	REQ	0	Outputs the signal which indicates separation of 8 bytes to the transmission microprocessor. It is connected with the microprocessor.
55	SLO	0	Normally not in use and set for "open".

Pin No.	Pin Name	1/0	Description
56	CK16	I	Outputs 64 clocks to enable the microprocessor to transmit the data.  Must be connected with the microprocessor.
57	DT16	I	Must be connected with the transmission microprocessor so that the microprocessor transmits 64 bit data.
58	SOUT	0	Normally not in use and must be set for "open".  (This terminal enables to serial monitor of the data input from DT16.)
59	ТОР	0	Outputs the $100 \mathrm{Hz}$ signal which informs the transmission microprocessor of the top of the data. Must be connected with the microprocessor.
60	ВІРН	I	Input terminal which receives the bi-phase signal sent from the RF amp.
61	BIDT	0	Normally not in use. Must be set for "open".
62	SDAT	0	Outputs NR2 which is the data input to DT16 from the transmission microprocessor, then added with CRC.
63	INIT	I	Initializing terminal for testing. Normally it is fixed for "H".
64	Vcc		Power terminal, (+5V)

# SECTION 3 ELECTRICAL ADJUSTMENTS

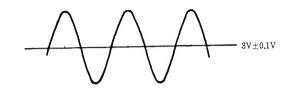
### [1] ADJUSTMENT OF REMOTE CONTROL RECEPTION WAVE DETECTION

### Setting:

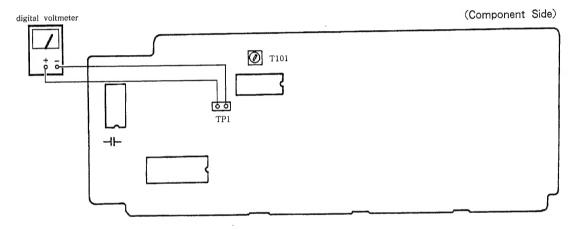


### Procedure:

- 1. Turn the power switch ON (insert the power cord in an AC outlet).
- 2. Connect the digital voltmeter to TP1.
- 3. Adjust T101 so that the digital voltmeter reading is  $3V\pm0.1V$ .
- 4. Connect the oscilloscope to TP1 and confirm that there are no waveform abnormalities,



### Adjustment Location: RF board



### [2] ADJUSTMENT OF CHANNEL SWITCHING CONTROL VOLTAGE

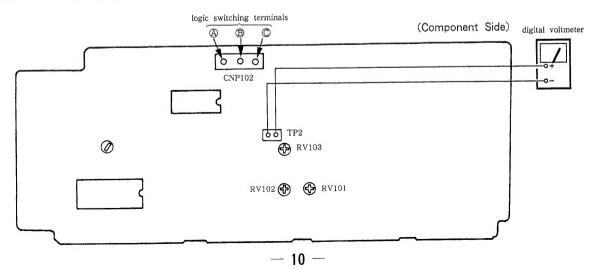
### Procedure:

- 1. Remove the CNP102 connector for switching of P1, P2 logic.
- 2. Connect the touch panel RMR-TP1 to the set, press the function switch TV/AUX and turn the power ON.
- 3. Connect the digital voltmeter to TP2.
- 4. Adjust VR101, RV102 and RV103 so that the logic of terminals P1 and P2 of CNP102 and the voltage display on the digital voltmeter are as shown in the table below.

P1	P2	CNP102 (Adjust point)	Adjustment part	digital voltmeter
L	Н		RV103	2.4V±0.1V
Н	L	A − C , B − C short open	RV102	5.5V±0.1V
Н	Н		. RV102	10.0V±0.1V

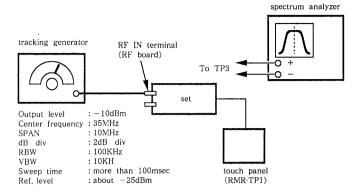
L=0V, H=5V

### Adjustment Location: RF board



### [3] ADJUSTMENT OF PCM TUNER

### Setting:



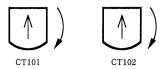
### Procedure:

- 1. Press the function switch TV/AUX on the touch panel (RMR-TP1).
- 2. Connect the spectrum analyzer to TP3.
- 3. Use the spectrum analyzer to observe the waveforms at that timer for the logic states of terminal P1 and P2 of CNP102. Adjust L103, L104 and CT101, CT102 to obtain the values shown below.

P1	P2	CNP102 (Adjust point)	Adjustment part	fc (MHz)
L	Н	$\mathbb{A} - \mathbb{C}$ , $\mathbb{B} - \mathbb{C}$	L103, L104	32,0MHz
Н	L	$\mathbb{A} - \mathbb{C}$ , $\mathbb{B} - \mathbb{C}$		35,0MHz
Н	Н	$\mathbb{A} - \mathbb{C}$ , $\mathbb{B} - \mathbb{C}$	CT101, CT102	38,0MHz

L=0V, H=5V

(i) First turn CT101 and CT102 clockwise 180 degrees.



- (ii) Adjust to (P1:L, P2:H) and turn alternately a little at a time until the center of the waveform crests is 32MHz and the top of the crest is as flat as possible (See Figure 1-1).
- (iii) Adjust to (P1:H, P2:H) and turn alternately a little at a time until the center of the waveforms is 38MHz and the top of the crest is as flat as possible (See Figure 1-2).
- (iV) Alternately carry out the adjustments in (ii) and (iii) three or four times,
- (V) Adjust to (P1:H, P2:L) and check that the center of the waveform is 35MH (See Figure 1-3).

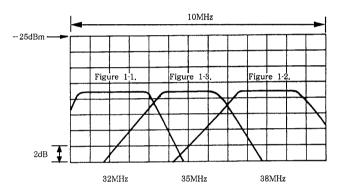
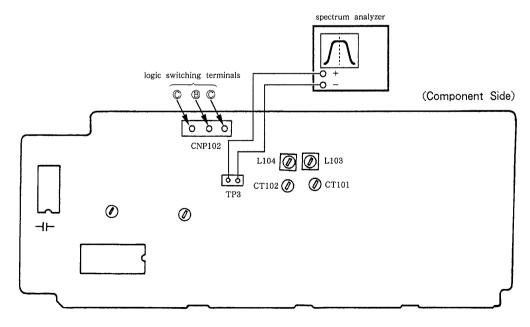


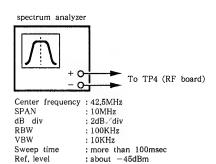
Figure 1.

### Adjustment Location: RF Board



### [4] ADJUSTMENT OF PCM TUNER OSC

### Setting:



### Procedure:

- 1. Connect the spectrum analyzer to TP4.
- 2. Adjust so that the waveforms at that time for the logic states of terminal P1 and P2 of CNP102 are as shown in the table below.

P1	P2	CNP102 (Adjust point)	Adjustment part	f osc (MHz)
L	Н		L105	39.5±100KHz
Н	L			42.5±200KHz
Н	Н		CT103	45,5±100KHz

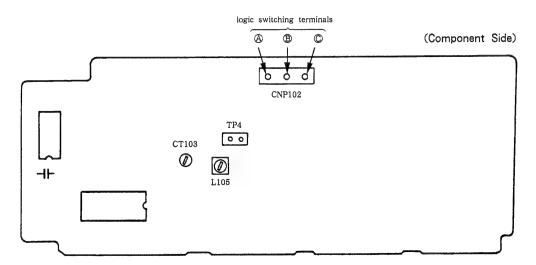
L=0V, H=5V

(i) First turn CT103 90 degress clockwise.



- (ii) Adjust to (P1:L, P2:H) and adjust L105 so that it eguals  $39.5MHz\pm100KHz$ ,
- (iii) Adjust to (P1:H, P2:H) and adjust CT103 so that it eguals  $45.5 MHz \pm 100 KHz$ ,
- (iV) Alternately carry out the adjustments in (ii) and (iii) three or four times,
- (V) Adjust to (P1; H, P2: L) and confirm that the oscillation frequency is  $42.5 MHz\pm200 KHz$ .
- 3. Re-insert the CNP102 connector.

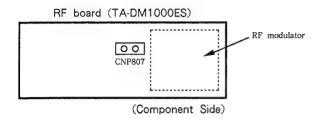
Adjustment Location: RF Board



### [5] ADJUSTMENT OF PHASE SHIFT KEYING VCO

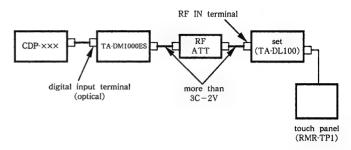
### (Cautions)

 Before setting, be sure to remove the CNP807 (2P) connector from the RF board of the TA-DM1000ES and connect it to the RF attenuator. Connecting to the RF attenuator without first removing the CNP807 could cause burn damage to the attenuator.



- The TA-DL100 and TA-DM1000ES have different power sources, Also, the TA-DM1000ES power source can be turned ON and OFF at the source,
- When at all possible, use a coaxial cable of 2 meters or less

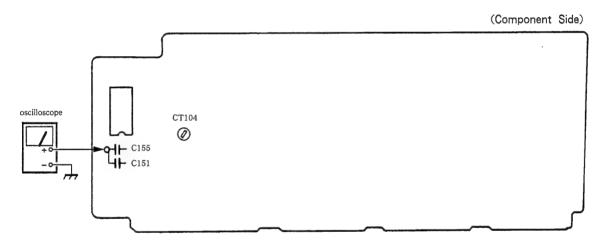
### Setting:



### Procedure:

- 1. Press the function switch CD1 on the touch panel (RMR-TP1).
- 2. Connect the oscilloscope to the C151 and C155 connections and check the eye pattern,
- 3. Attenuate the RF attenuator 1dB at a time from -30dB to about -40dB and adjust CT104 so that the eye pattern can be seen even with weak input.

Adjustment Location ; RF Board

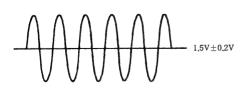


### [6] DECODER PLL ADJUSTMENT

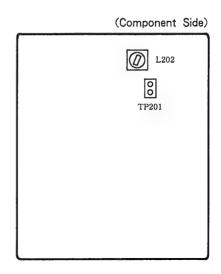
Setting: see [5]

### Procedure:

- 1. Connect the oscilloscope to TP201 (being sure to set the probe to  $\times 10$ ).
- 2. Observe the oscilloscope waveforms and adjust L202 so that the center of the waveforms of the oscillation frequency is 1.5V.



Adjustment Location: DECODER board



# **MEMO**

## SECTION 4 DIAGRAMS

### 4-1. SEMICONDUCTOR LEAD LAYOUTS

M5F7812L M5F7808L







M5F7912 M5F7905L



HZS6A3L JZL-6M2 ISS120 I1ES2



L78MR05



RBA-402



μPC1651G



S1585 0E2



DTA114ES DTC114ES 2SC2458-YGR 2SC3622A-LK

SEL2210S-D



2SC1845-EA



TLP521-1-GR



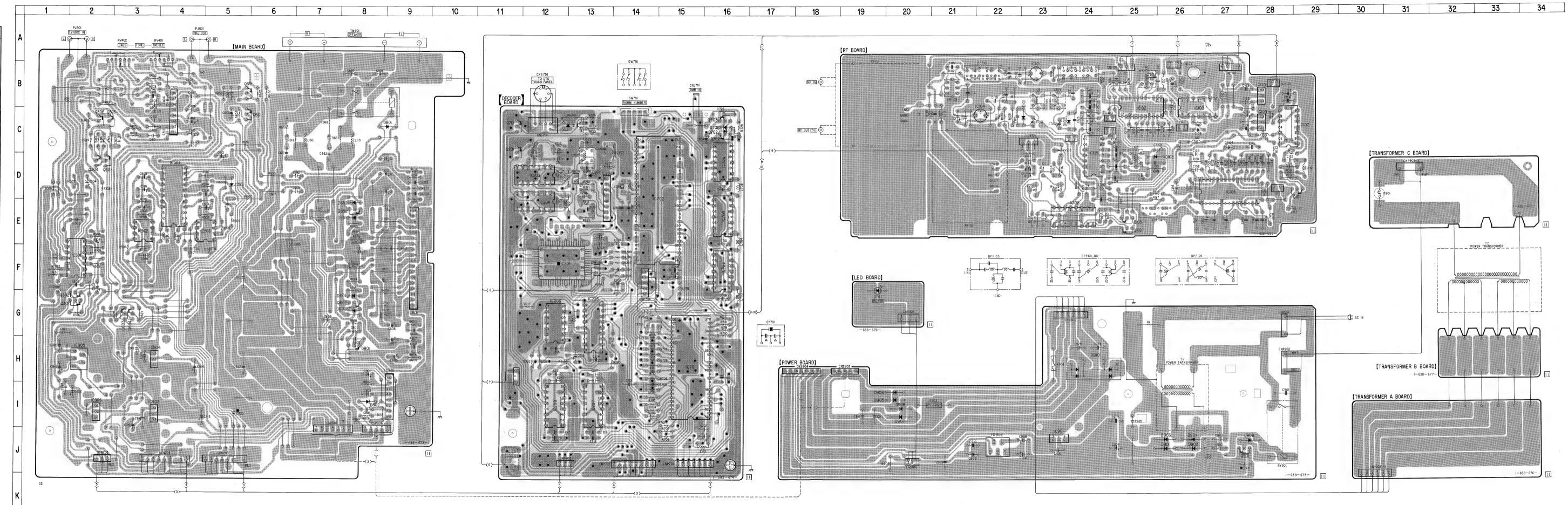
4-2. PRINTED WIRING BOARDS • Refer to Page 15 for Semiconductor Lead Layouts.

### • SEMICONDUCTOR LOCATION

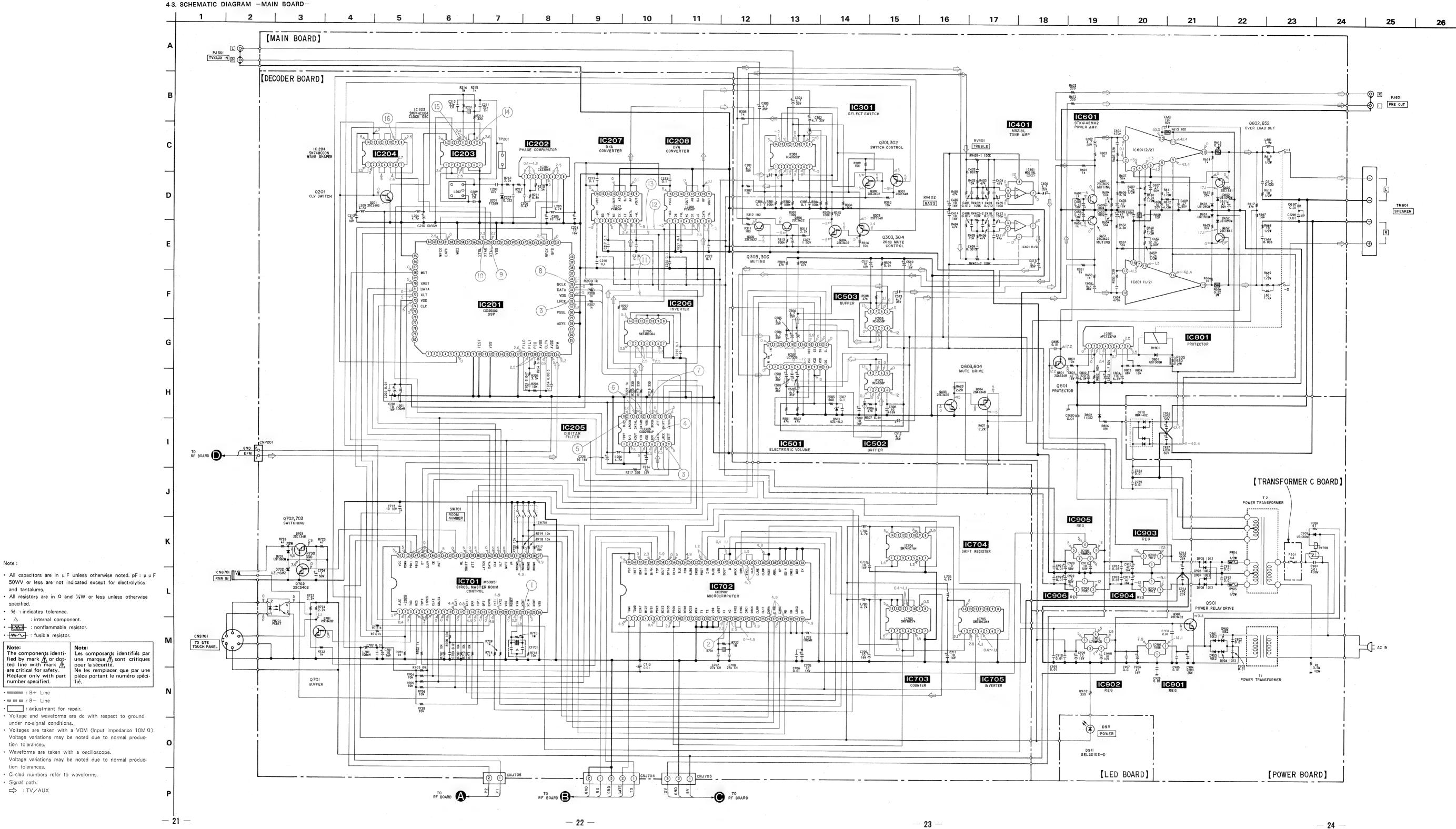
Ref. No.	Location	Ref. No.	Location	1
D101	C-23	IC501	D-4	
D102	C-24	IC502	E-3	
D103	D-25	IC503	E-5	
D201	D-13	IC601	F-9	
D501	D-5	IC701	H-15	
D601	G-8	IC702	D-14	
D602	G-8	IC703	F-16	
D651	E-8	IC704	E-16	
D652	E-8	IC705	D-16	
D701	C-16	IC801	I-9	
D702 D801 D802 D901 D902	C-16 C-9 I-8 J-26 J-26	IC901 IC902 IC903 IC904 IC905 IC906	J-23 J-22 I-3 H-3 H-2 I-2	
D903 D904 D905 D906 D907	J-26 J-26 I-20 I-20 I-20	Q101 Q102 Q103 Q201	D-29 E-25 E-25 C-11	
D908	I-20	Q301	G-2	
D909	J-28	Q302	G-2	
D910	H-24	Q303	D-2	
D911	F-19	Q304	D-2	
IC101	B-23	Q305	C-2	
IC102	C-25	Q306	C-2	
IC103	C-26	Q601	C-5	
IC104	C-22	Q602	G-8	
IC105	D-24	Q603	G-3	
IC106	D-27	Q604	G-3	
IC107	C-28	Q651	B-5	
IC108	E-24	Q652	E-8	
IC109	C-28	Q701	C-11	
IC110	B-28	Q702	C-16	
IC201 IC202 IC203 IC204 IC205	F-12 D-13 D-12 E-12 G-13	Q703 Q801 Q901	C-16 H-8 J-27	
IC206 IC207 IC208 IC301 IC401	G-12 I-13 I-12 F-2 C-4			

### ote:

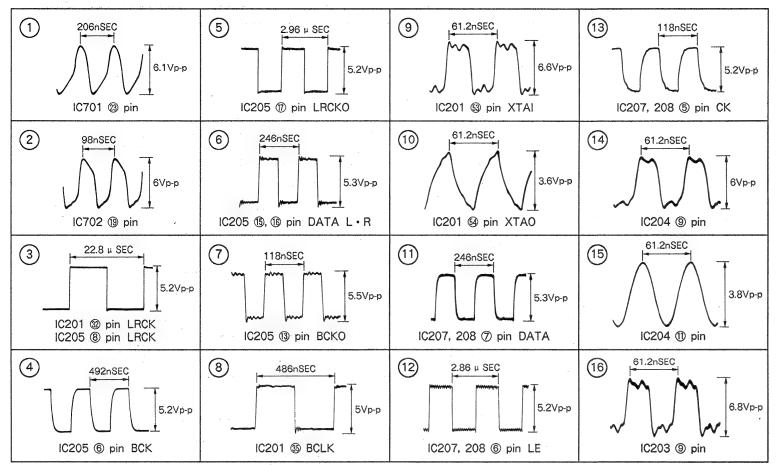
- · O—: parts extracted from the component side.
- • : parts extracted from the conductor side.
- : parts mounted on the conductor side. : Pattern on the side which is seen.

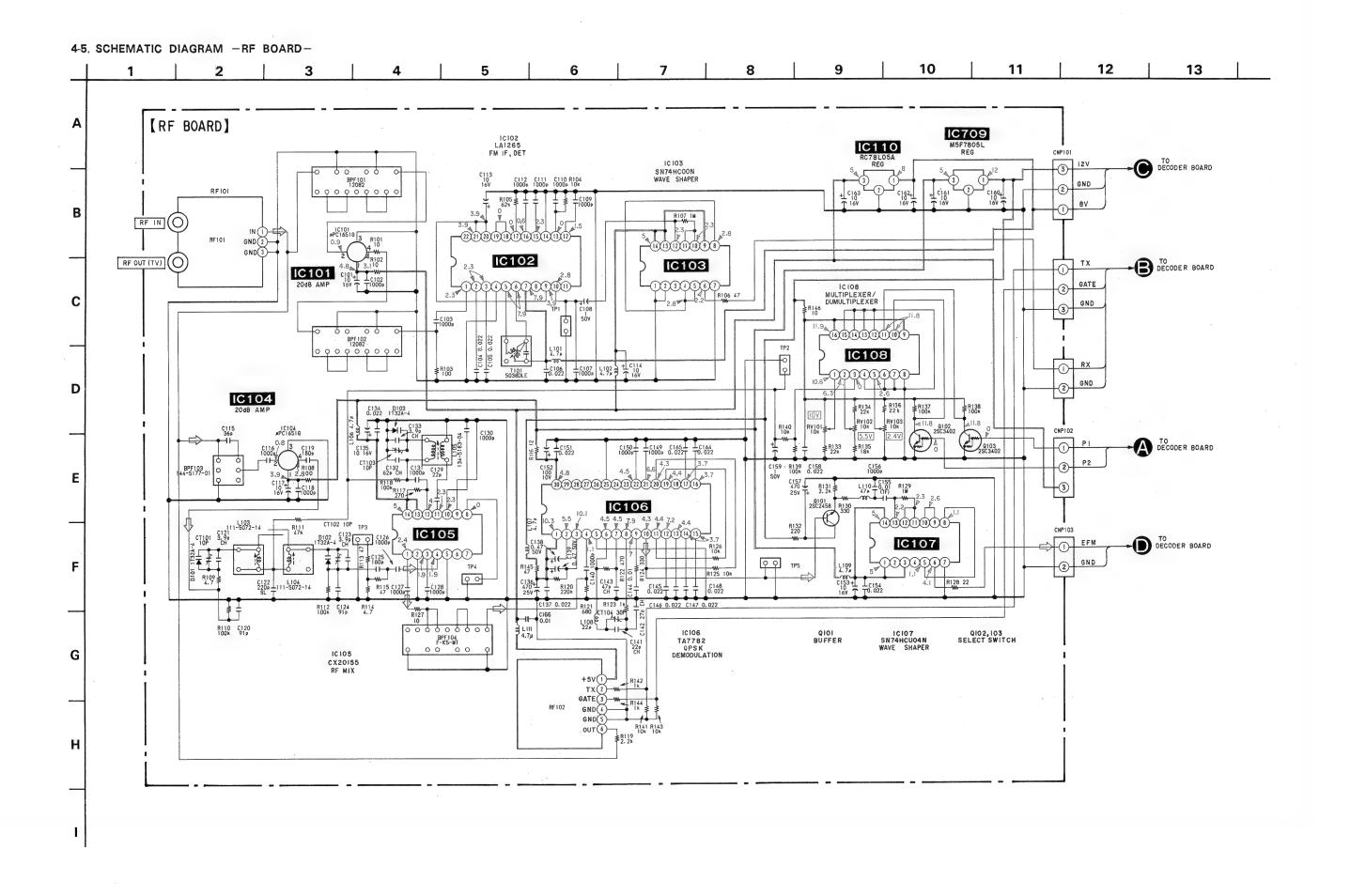


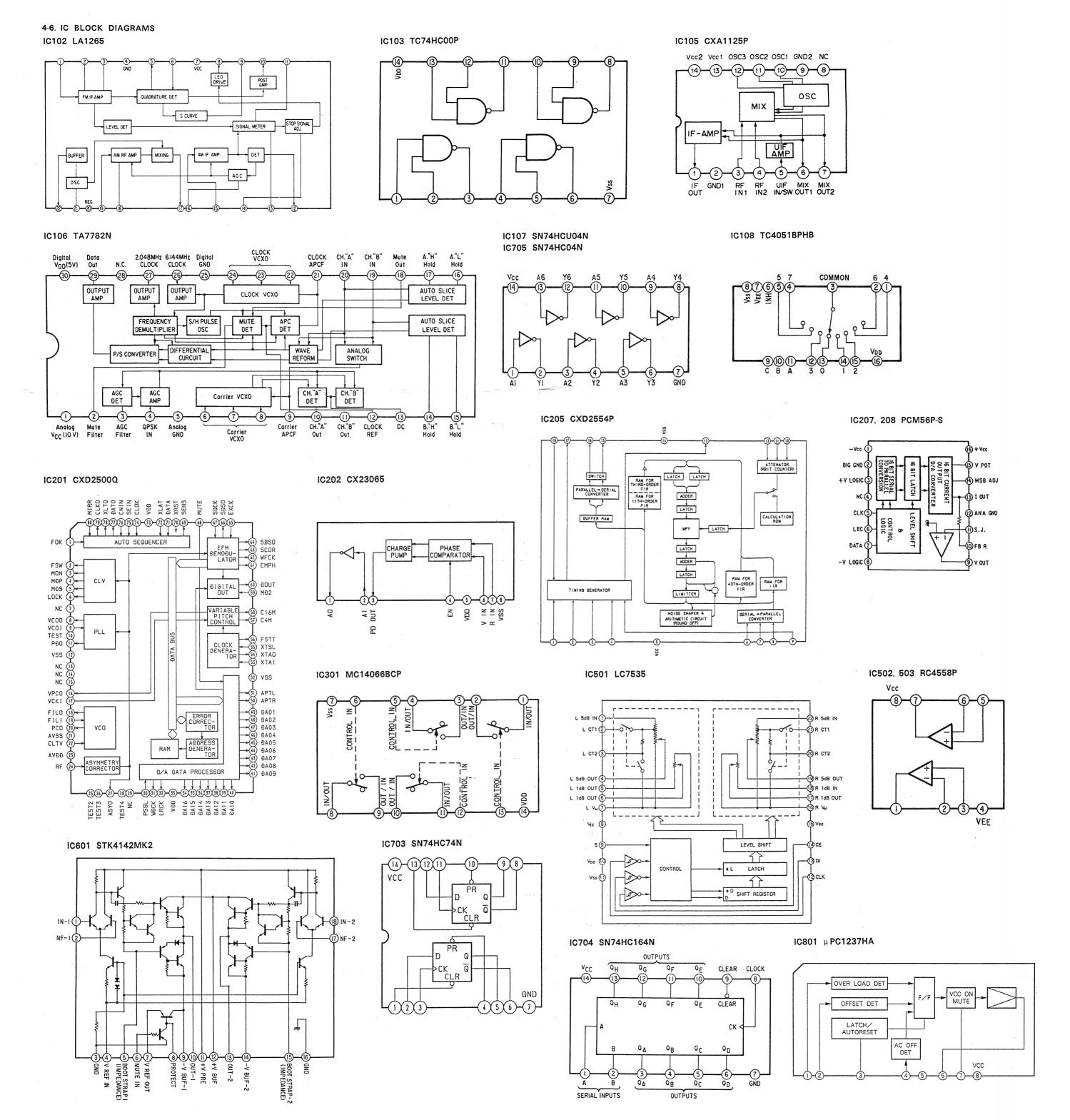
— 19 —



### 4-4. WAVEFORMS







### SECTION 5 EXPLODED VIEW

### NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Color indication of Appearance Parts Example:

KNOB, BALANCE (WHITE)....(RED)

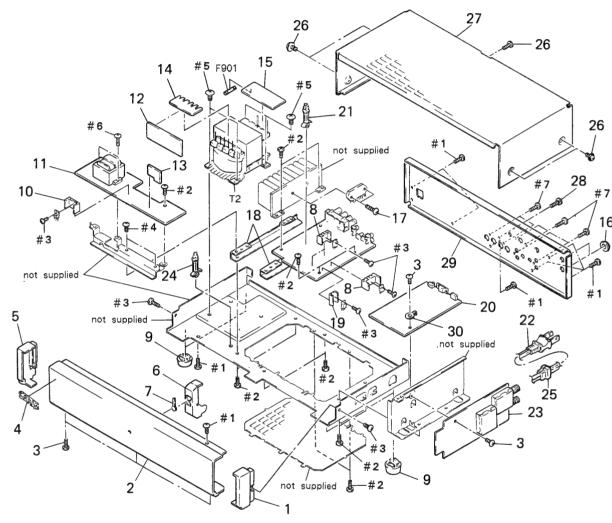
Parts color Cabinet's color

- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (#mark) list is given in the last of this parts list.

The components identified by mark A or dotted line with mark A are critical for safety.
Replace only with part number

Les composants identifiés par une marque A sont critiques pour la sécurité.

Ne les remplacer que par une pièce portant le numéro spécifé.



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-943-549-01	PANEL (R), SIDE		17	4-928-635-11	SCREW, +BV (2.6X16) TAPPING	
2	4-943-548-01	PANEL, FRONT		18	* 4-921-314-01	BRACKET (P)	
3	3-703-685-21	SCREW (+BV 3X8)		19	* 3-309-144-21	HEAT SINK	
4	4-908-848-01	EMBLEM, SONY		20	* A-4341-447-A	DECODER BOARD, COMPLETE	
5	4-943-550-01	PANEL (L), SIDE		2 1	* 4-924-098-81	HOLDER, PC BOARD	
6	* 4-943-554-01	PAENL, SUB		22	<b>1−575−975−1</b>	CORD, POWER	
7	4-943-376-01	WINDOW (A)		23	* A-4341-444-A	RF BOARD, COMPLETE	
8	* A-4341-442-A	MAIN BOARD, COMPLETE		24	* 3-703-353-08	SUPPORTER, PC BOARD	
9	4-930-848-01	FOOT		25	* 3-703-244-00	BUSHING (2104), CORD	
10	* 4-363-146-21	HEAT SINK, V. OUT		26	3-704-366-01	SCREW (CASE) (M3X8)	
11	* 1-638-675-11	POWER BOARD		27	* 4-943-546-11	CASE	
12	* 1-638-678-11	TRANSFORMER C BOARD		28	7-621-849-00	SCREW, TAPPING	
13	* 1-638-679-11	LED BOARD		29	* 4-943-547-01	PAENL, BACK	
14	* 1-638-677-11	TRANSFORMER B BOARD		30	4-870-539-00	PLATE, GROUND	
15	* 1-638-676-11	TRANSFORMER A BOARD		F901	<b>1-532-746-11 1 1 1 1</b>	FUSE, GLASS TUBE	
16	3-682-691-00	NUT, WASHER HEXAGON		T2	<u>A</u> 1-450-321-11	TRANSFORMER, POWER	

### **DECODER**

### SECTION 6 **ELECTRICAL PARTS LIST**

### NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- −XX, −X mean standardized parts, so they may have some difference from the original one.
- RESISTORS All resistors are in ohms METAL: Metal-film resistor

METAL OXIDE: Metal Oxide-film resistor F: nonflammable

- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS In each case,  $u: \mu$ , for example: uA....: μA...., uPA....: μPA....

uPB....: μPB...., uPC....: μPC....

uPD....: μPD.... • CAPACITORS

uF: μF COILS uH: μH The components identified by mark \( \int \) or dotted line with mark \( \int \) are critical for safety.

Replace only with part number

Les composants identifiés par une marque sont critiques pour la sécurité.

Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

Ref. No.	Part No.	Description			Remark 	Ref. No.	Part No.	Description			Remark
	* A-4341-447-A	DECODER BOARD,	COMPLETE			C701	1-126-157-11		10uF	20%	16V
		*********	*****			C702	1-161-379-00	CERAMIC	0.01uF	20%	25V
						C703	1-161-379-00		0.01uF	20%	25V
	4-870-539-00	PLATE, GROUND				C704	1-126-301-11	ELECT	1uF	20%	50V
						C705	1-126-157-11	ELECT	10uF	20%	16V
		< CAPACITOR >									
						C706	1-161-379-00		0.01uF		25V
C201	1-126-157-11	ELECT	10uF	20%	16V	C707	1-164-056-11	CERAMIC	27PF	5%	50V
C202	1-161-379-00		0. 01uF	20%	25V	C708	1-164-056-11	CERAMIC	27PF	5%	50V
C203	1-130-491-00	MYLAR	0.047uF	5%	50V	C709	1-126-157-11	ELECT	10uF	20%	16V
C204	1-130-473-00	MYLAR	0.0015uF	5%	50V	C710	1-126-157-11	ELECT	10uF	20%	16V
C205	1-126-157-11	ELECT	10uF	20%	16V	1					
						C711	1-126-157-11	ELECT	10uF	20%	16V
C206	1-136-173-00	FILM MYLAR	0. 47uF	5%	50V	C712	1-161-379-00		0.01uF		25V
C207	1-136-157-00	MYLAR	0.022uF	10%	50V	C713	1-126-157-11	ELECT	10uF		16V
C208	1-164-035-11	CERAMIC	47PF	5%	50V						
C209	1-164-035-11	CERAMIC	47PF	5%	50V			< CERAMIC>			
C210		ELECT			16V						
						CF701	1-579-233-11	VIBRATOR, CERA	MIC .		
C211	1-164-027-11	CERAMIC	22PF	5%	50V						
C212	1-164-027-11	CERAMIC CERAMIC	22PF	5%	50V			< CONNECTOR >			
C213	1-126-157-11	ELECT	10 u F		16V	1		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
C214	1-126-157-11	ELECT	10uF		16V	CNJ701	1-580-456-11	JACK (SMALL TY	PF) (RMR IN	١	
C215	1-164-159-11		0. 1uF		50V	"""		onon (omnee 11	1 27 (11111)	,	
			. ,		•••	CNP201 #	1-564-505-11	PLUG. CONNECTO	R 2P		
C216	1-164-159-11	CERAMIC	0. 1uF		50V	l .		PLUG. CONNECTO			
C217	1-164-159-11	CERAMIC CERAMIC CERAMIC	0. 1uF		50V	1		PLUG. CONNECTO			
C218	1-164-159-11	CERAMIC	0. 1uF		50V	1		PLUG, CONNECTO			
C219	1-164-159-11		0. 1uF		50V			PLUG, CONNECTO		נוחד פ	CH DANEL
C220	1-164-159-11		0. 1uF		50V	011104 1	. 1 304 300 11	TEOO, COMMECTO	N 37 (10 D1	3 100	ON FAMEL
0220	1 104 105 11	OLIMINIO	V. 141		001	CNS701	1_500_705_11	CONNECTOR, DIN	(CHALL) 6	D	
C221	1-164-159-11	CERAMIC	0. 1uF		50V	0,0701	1 300-123-11	COMMECTOR, DIN	(SMALL) 0	ſ	
C222	1-164-159-11		0. 1uF		50V	[		< DIODE >			
C223	1-164-159-11		0. 1uF		50V			V DIODE >			
C224	1-126-157-11		10uF	20%		D201	0.710.007 40	DIANE ECESII E			
C224	1-126-157-11		10ur 10uF	20%				DIODE FC52M-5			
0770	1-120-137-11	LLLUI	IVUF	2 0 %	104	D701		DIODE 188120			
						D702	8-119-000-60	DIODE UZL-6M2			

### DECODER

Ref. No.	Part No.	Description		Remark 	Ref. No.	Part No.	Description			Remark
		< IC >			R214	1-249-411-11		330	5%	1/4W
					R215	1-249-417-11	CARBON	1 K	5%	1/4W
IC201	8-752-335-15	1C CXD2500Q			R216	1-247-903-00	CARBON	1M	5%	1/4W
1C202	8-752-306-51	IC CX23065A			R217	1-249-411-11	CARBON	330	5%	1/4W
10203	8-759-917-18	IC SN74HCU04N			R218	1-249-411-11		330	5%	1/4W
10204		IC SN74HC00N						•••		.,
IC205	8-752-337-09				R219	1-249-411-11	CARRON	330	5%	1/4W
10000	0 102 001 00	10 00020011			R220	1-249-411-11		330	5%	1/4W
1C206	8-750-017-18	IC SN74HCU04N			R221	1-249-417-11		1 K	5%	1/4W
1C207	8-759-998-22				R222				5%	
					l .	1-249-411-11		330		1/4W
10208	8-759-998-22				R701	1-249-417-11	CARBON	1 K	5%	1/4W
10701		IC M50951-112SP								4.400
10702	8-759-510-05	1C CXD29028			R702	1-249-417-11		1 K	5%	1/4W
					R703	1-249-429-11		10K	5%	1/4W
10703		IC SN74HC74N			R704	1-249-429-11		10K	5%	1/4W
10704		IC SN74HC164N			R705	1-249-429-11	CARBON	10 K	5%	1/4W
IC705	8-759-916-14	IC SN74HC04N			R706	1-249-429-11	CARBON	10K	5%	1/4W
		< COIL >			R707	1-249-429-11	CARBON	10K	5%	1/4W
					R708	1-249-429-11	CARBON	10K	5%	1/4W
L201	1-408-421-00	INDUCTOR 100uH			R709	1-249-429-11	CARBON	10K	5%	1/4W
L202	1-460-099-11	COIL			R710	1-249-429-11		10K	5%	1/4W
L203	1-410-324-11				R711	1-249-429-11		10K	5%	1/4W
L204	1-410-324-11						***************************************		070	17 311
L205	1-410-324-11				R712	1-249-417-11	CARRON	1 K	5%	1/4W
L203	1 410 024 11	4. 1411			R713	1-249-417-11		1 K	5%	1/4W
L206	1-410-324-11	INDUCTOR 4. 7uH			R714	1-249-417-11		1 K	5%	
L701	1-408-421-00									1/4W
					R715	1-247-903-00		1M	5%	1/4W
L702	1-408-421-00				R716	1-249-429-11	CARRON	10 K	5%	1/4W
L703	1-410-324-11									
L704	1-410-324-11				R717	1-249-429-11		10 K	5%	1/4W
L705	1-410-324-11	INDUCTOR 4. 7 uH			R718	1-249-429-11		10 K	- 5%	1/4W
					R719	1-249-429-11		10 K	5%	1/4W
		<pre>&lt; PHOTO INTERUPTER &gt;</pre>			R720	1-249-429-11		10 K	5%	1/4W
PH701	0_710_000_04	DIODE TLP521-1-GR			R722	1-249-417-11	CARBON	1 K	5%	1/4W
FNIVI	0-119-002-04	DIODE IEF3ZI-I-OK			R723	1-249-421-11	CARBON	2. 2K	5%	1/4W
		< TRANSISTOR >			R724	1-249-421-11		2. 2K	5%	1/4W
					R725	1-249-401-11		47	5%	1/4W
0201	8-729-900-80	TRANSISTOR DTC114ES			R726	1-260-083-81		47	5%	1/2W
0701		TRANSISTOR DTC114ES			R727	1-247-903-00		1M	5%	1/4W
0702		TRANSISTOR DTC114ES			1121	1 247 300-00	CARBON	I DVI	370	1/411
0703		TRANSISTOR DTA114ES			R728	1-249-429-11	CADDON	101	En/	1 / 4111
4103	0-129-300-01	INANSISION DIAITALS			R729			10K	5%	1/4W
		/ DECICTOR \			l	1-249-417-11		1 K	5%	1/4W
		< RESISTOR >			R730	1-249-411-11	CARBON	330	5%	1/4W
R204	1-249-423-11		5%	1/4W			< SWITCH >			
R205	1-249-423-11	CARBON 3.3K	5%	1/4W						
R206	1-249-429-11	CARBON 10K	5%	1/4W	SW701	1-572-681-11	SWITCH, DIGITA	L (SMALL	TYPE)	
R207	1-249-417-11	CARBON 1K	5%	1/4W						NUMBER)
R208	1-249-417-11	CARBON 1K	5%	1/4W						,
R209	1-249-417-11	CARBON 1K	5%	1/4W			< CONNECTOR >			
R210	1-249-419-11		5%	1/4W	TP201	± 1=56/=505=11	DING CONNECTO	ם מ		
R211					17201	· 1-004-000-11	PLUG, CONNECTO	n Zr		
	1-249-427-11		5%	1/4W						
R212	1-249-429-11		5%	1/4W						
R213	1-249-421-11	CARBON 2.2K	5%	1/4W	1					

### DECODER MAIN

Ref. No.	. Part No.	Description			Remark 	Ref. No.	Part No.		Description 			Remark
		< CRYSTAL >				C602	1-126-163	-11	ELECT	4. 7uF	20%	50V
						C603	1-162-282	-31	CERAMIC CERAMIC	100PF	10%	50V
X201	1-567-908-11	VIBRATOR, CRYS	TAL			C604	1-162-290	-31	CERAMIC	470PF	10%	50V
X701		VIBRATOR, CRYS				C605	1-124-477	-11	ELECT	47uF	20%	25V
						C606	1-130-495			0. 1uF	5%	50V
*****	******	******	*******	****	******	••••						
						C607	1-124-910	-11	ELECT	47uF	20%	50V
	* A-4341-442-A	MAIN BOARD, CO	MPLETE			C608	1-124-907			10uF	20%	50V
		********				C609	1-124-910			47uF	20%	50V
						C610				100uF	20%	
	* 3-309-144-21	HEAT SINK			]	C611	1-124-910	-11		47uF	20%	50V
		HEAT SINK, V. O	UT									
		PLATE, GROUND				C612	1-130-489	-00	MYLAR	0. 033uF	5%	50V
						C651	1-124-902	-00		0. 47uF	20%	50V
		< CAPACITOR >				C652	1-126-163			4. 7uF	20%	50.V
		· ommorrom /				C653	1-162-282			100PF	10%	50V
C301	1-126-163-11	FLECT	4. 7uF	20%	50V	C654	1-162-290			470PF	10%	50V
C302	1-126-163-11		4. 7uF	20%							•	
C302	1-126-163-11			20%		C655	1-124-477	-11	ELECT	47uF	20%	25V
C304	1-126-163-11		4. 7uF	20%		C657	1-124-910	-11		47uF	20%	
C305	1-164-159-11		0. 1uF	2070	50V	C662	1-130-490	-00	MYLAR	0. 033uF	5%	50V
6303	1-104-133-11	CLIMANIO	v. tui		301	C697	1-164-095			0. 01uF	10%	
0000	1 104 150 11	CERAMIC	0. 1uF		50V	C698	1-164-095			0. 01uF	10%	16V
C306			o. Tur 1uF	20%	· ·	6030	1-104-095	-11	CENAMIC	0. 0 (0)	1076	104
C307	1-126-301-11				I .	C699	1 101 006	0.0	CERAMIC	0. 047uF		50 <b>V</b>
C401	1-130-484-00		0. 012uF	5%	50V						0.00/	25V
C402	1-130-473-00		0.0015uF		50V	C801	1-124-477			47uF		
C403	1-130-484-00	MYLAK	0.012uF	5%	50V	C802	1-126-176			220uF	20%	
		0504440	4705	F0/	FAV	C803			ELECT	4. 7uF	20%	100V
C404	1-162-215-31	CERAMIC CERAMIC	4/21	5%	50V	C804	1-124-443	-00	ELECT	100uF	20%	10 <b>V</b>
C405	1-162-282-31	CERAMIC	10077	10%		0005	1 101 070		00011110	0.05	0.00/	0.514
C406	1-126-163-11	ELECT ELECT	4. 7uF		50V	C805	1-161-379			0.01uF	20%	
C407				20%		C913			ELECT	2200uF	20%	
C408	1-130-484-00	MYLAK	0. 012uF	5%	50V	C914	1-124-480	-11	ELECT ELECT	470uF		25V
			0 0045 5	re/	FAV	C915	1-124-4//	-11	ELECT	47uF		25V
C409	1-130-473-00		0.0015uF	5%	50V	C916	1-151-379	-00	CERAMIC	0. 01uF	20%	25V
C410	1-130-484-00		0.012uF	5%	50V	0017	4 404 477		FLEAT	47. 6	0.00/	0.51/
C411	1-162-215-31		47PF	5%	50V	C917			ELECT	47uF		25V
C412	1-162-282-31	CERAMIC	100PF	10%		C918	1-161-379			0.01uF		25V
C413	1-126-163-11	FLECI	4. /ut	20%	50V	C919			ELECT	10uF	20%	
	•					C920			ELECT	10 u F	20%	50V
C414	1-126-157-11	ELECT ELECT	10uF	20%		C921	1-161-379	-00	CERAMIC	0.01uF	20%	25V
C501				20%	<b>I</b>							
C502	1-126-163-11			20%		C922	1-124-907	-11	ELECT	10uF	20%	
C503	1-126-163-11		4. 7uF	20%		C923	1 101 013	00	OLIVAINIO	v. v iui		25V
C504	1-126-163-11	ELECT	4. 7uF	20%	50V	C926	1-128-232			4700uF		50V
						C927	1-128-232			4700uF		50V
C505	1-126-163-11		4. 7uF		50V	C930	1-161-379	-00	CERAMIC	0.01uF	20%	25V
C506	1-126-163-11		4. 7uF	20%	50V							
C507	1-164-159-11	CERAMIC	0. 1uF		50V				< CONNECTOR >			
C508	1-126-157-11	ELECT	10uF	20%	16V							
C509	1-126-157-11	ELECT	10uF	20%	16V				PIN, CONNECTOR			
					[	CNP907	* 1-565-366	-11	PIN, CONNECTOR	(PC BOARD	7P	
C510	1-126-157-11	ELECT	10uF	20%	16V							
		FLECT	10uF	20%	16V							
C511	1-126-157-11	LLLOI										
	1-126-157-11 1-126-163-11		4. 7uF	20%	50V							
C511		ELECT		20% 20%	1							
C511 C512	1-126-163-11	ELECT ELECT	4. 7uF	20%	1							

### MAIN

Ref. No.	Part No.	Description	Remark 	Ref. No.	Part No.	Description			Remark
		< DIODE >	<del></del>			< RESISTOR >			
D501	8-719-933-35	DIODE HZS6A3L		R301	1-249-441-11	CARRON	100K	5%	1/4W
D601		DIODE 181585		R302	1-249-441-11		100K	5%	1/4W
D602		DIODE 181585		R303	1-249-441-11		100K	5%	1/4W
D651		DIODE 181585		R304	1-249-441-11		100K	5%	1/4W
				R305	1-249-441-11		100K	5%	1/4W
D652	8-719-815-85	DIODE 181585				VIII.0 VII	10011	070	17 411
D801	8-719-912-20	D10DE 1SS120		R306	1-249-441-11	CARBON	100K	5%	1/4W
D802	8-719-200-82	DIODE 11ES2		R307	1-249-417-11		1 K	5%	1/4W
				R308	1-249-417-11	CARBON	1 K	5%	1/4W
		< 10 >		R309	1-249-429-11	CARBON	10K	5%	1/4W
				R310	1-249-429-11	CARBON	10K	5%	1/4W
IC301		IC MC14066BCP							
IC401	8-759-634-50	IC M5218AL		R311	1-249-405-11	CARBON	100	5%	1/4W
JC501	8-759-820-11			R312	1-249-405-11	CARBON	100	5%	1/4W
IC502	8-759-945-58			R313	1-249-441-11	CARBON	100K	5%	1/4W
IC503	8-759-945-58	IC RC4558P	l	R314	1-249-421-11		2. 2K	5%	1/4W
				R315	1-249-429-11	CARBON	10 K	5%	1/4W
10601		IC STK4162MK2	İ						
IC801		IC uPC1237HA		R316	1-249-429-11		10K	5%	1/4W
10903	8-759-604-33			R401	1-249-437-11		47K	5%	1/4W
10904	8-759-604-51		Ì	R402	1-249-431-11		15K	5%	1/4W
10905	8-759-820-84			R403	1-249-437-11		47 K	5%	1/4W
IC906	8-759-604-47	IC M5F7905L		R404	1-249-437-11	CARBON	47K	5%	1/4W
		< COIL >		R405	1-249-431-11	CARBON	15K	5%	1/4W
				R406	1-249-437-11	CARBON	47K	5%	1/4W
		COIL, AIR CORE		R501	1-249-437-11		47K	5%	1/4W
L651 ×	* 1-420-8/2-00	COIL, AIR CORE		R502	1-249-437-11		47K	5%	1/4W
		< JACK >		R503	1-249-437-11	CARBON	47 K	5%	1/4W
		C JACK /		R504	1 240 427 11	CARRON	470	Fo/	4 / 404
PJ301	1-565-352-21	JACK, PIN 2P (TV/AUX IN)		R505	1-249-437-11		47K 560	5% 5%	1/4W
PJ601		JACK, PIN 2P (PRE OUT)		R506	1-249-437-11		47K	5%	1/4W 1/4W
		the conj		R507	1-249-426-11		5. 6K	5%	1/4 <b>W</b>
		< TRANSISTOR >		R508	1-249-437-11		47K	5%	1/4W
Q301	0 700 000 61	TRANSISTOR DTA114ES		DEAA	4 040 400 44				
0302		TRANSISTOR DTC114ES		R509	1-249-426-11		5. 6 K	5%	1/4W
Q303		TRANSISTOR DTA114ES		R601	1-249-417-11		1 K	5%	1/4W
Q304		TRANSISTOR DTC114ES		R602	1-249-417-11		1 K	5%	1/4W
0305		TRANSISTOR 2SC3622A-LK		R603 R604	1-249-417-11		1 K	5%	1/4W
				N004	1-249-438-11	CARBUN	56 K	5%	1/4W
Q306		TRANSISTOR 2SC3622A-LK		R605	1-249-409-11		220	5%	1/4W
Q601		TRANSISTOR 2SC3622A-LK		R606	1-249-423-11		3.3K	5%	1/4W
0602		TRANSISTOR 2SC1845-EA		R607	1-249-438-11		56K	5%	1/4W
Q603		TRANSISTOR DTC114ES		R608	1-247-700-11		100	5%	1/4W
Q604	0-178-300-01	TRANSISTOR DTA114ES		R609	1-247-756-11	CARBON	2. 2K	5%	1/2W
Q651		TRANSISTOR 2SC3622A-LK		R610	1-247-756-11		2. 2K	5%	1/2W
Q652		TRANSISTOR 2SC1845-EA	1	R611	1-247-752-11		1 K	5%	1/2W
Q801	8-129-900-61	TRANSISTOR DTA114ES		R612	1-247-752-11		1 K	5%	1/2W
				R613	1-247-700-11		100	5%	1/4W
				R614	1-249-417-11	CARBON	1 K	5%	1/4W

MAIN POWER RF TR	ANSFOR	MER A	TRANSFO	RMER B	TRANSFO	RMER	C LE	ED
Ref. No. Part No. Description		Ren	I	Part No.	Description		Rema	
R615 1-249-435-11 CARBON	33K 5	5% 1/4W		1-533-225-11	HOLDER, FUSE			
R616 1-217-151-00 RES. METAL F	LATE 0.22			1-533-225-11				
R617 1-249-437-11 CARBON		5% 1/4W			HEAT SINK, V. OUT			
R618 1-247-727-11 CARBON		5% 1/2W		4-870-539-00	PLATE, GROUND			
R619 1-247-727-11 CARBON	10	5% 1/2W			(ENCAPSULATED C	OMPONENT>		
R620 1-249-421-11 CARBON	2. 2K	5% 1/4W	BPF101	1 225 002 11	ENCAPSULATED COM	DONENT (DD	E)	
R621 1-249-421-11 CARBON		5% 1/4W	BPF102		ENCAPSULATED COM			
R622 1-249-409-11 CARBON	220	5% 1/4W	BPF103		COIL (FILTER)		,	
R651 1-249-417-11 CARBON		5% 1/4W	BPF104		ENCAPSULATED COM	PONENT (BP	F)	
R652 1-249-417-11 CARBON	1K !	5% 1/4W				·		
R653 1-249-417-11 CARBON	1 K	5% 1/4W			< CAPACITOR >			
R654 1-249-438-11 CARBON		5% 1/4W		4 400 457 44	FLFOT 1	۸ ۸	00/ 101/	
R655 1-249-409-11 CARBON		5% 1/4W	C101	1-126-157-11			0% 16V 0% 50V	
R656 1-249-423-11 CARBON		5% 1/4W	C102	1-162-294-31 1-162-294-31			0% 50V	
R657 1-249-438-11 CARBON	56K	5% 1/4W	C103 C104	1-161-494-00		. 022uF	25V	
			C105	1-161-494-00		. 022uF	25V	
R659 1-247-756-11 CARBON	2. 2 K	5% 1/2W	0103	1-101 434 00	OLIMAII O	. 02241	201	
R660 1-247-756-11 CARBON	2. 2 K	5% 1/2W	C106	1-161-494-00	CERAMIC 0	. 022uF	25V	
R664 1-249-417-11 CARBON		5% 1/4W	C107	1-162-294-31			0% 50V	
R665 1-249-435-11 CARBON		5% 1/4W	C108	1-126-301-11			0% 50V	
R666 1-217-151-00 RES, METAL	PLATE 0.22		C109	1-162-294-31	CERAMIC 0	.001uF 1	0% 50V	
	F 0 1/	Fe/ 4 / AU	C110	1-162-294-31	CERAMIC 0	.001uF 1	0% 50V	
R667 1-249-438-11 CARBON		5% 1/4W						
R668 1-247-727-11 CARBON		5% 1/2W 5% 1/2W	C111	1-162-294-31	CERAMIC 0		0% 50V	
R669 1-247-727-11 CARBON		5% 1/4W	C112	1-162-294-31			0% 50V	
R672 1-249-409-11 CARBON R801 1-249-429-11 CARBON		5% 1/4W	C113	1-126-157-11			0% 16V	
R801 1-249-429-11 CARBON	101	3/0 1/ 411	C114	1-126-157-11			0% 16V	
R802 1-249-441-11 CARBON	100K	5% 1/4W	C115	1-164-032-11	CERAMIC 3	36PF 5	% 50V	
R803 1-249-439-11 CARBON		5% 1/4W	0110	1 100 004 21	CEDANIC 0	). 001uF 1	0% 50V	
R804 1-249-429-11 CARBON	10 K	5% 1/4W	C116 C117	1-162-294-31			0% 16V	
R805 1-215-891-11 METAL OXIDE	680	5% 2W	F C118	1-162-294-31			0% 50V	
R806 1-249-432-11 CARBON	18K	5% 1/4W	C119	1-162-285-31			0% 50V	
< VARIABLE	RESISTOR >		C120	1-162-281-31			0% 50V	
			C121	1-162-194-31	CERAMIC 3	3.9PF 1	0% 50V	
RV401 1-241-357-11 RES. VAR. C	ARBON 100K/10	OK (TREBL	C122	1-164-077-11		220PF 1	0% 50V	
RV402 1-241-357-11 RES, VAR, C	ARBON 100K/10	OOK (BASS)	C123	1-162-194-31	CERAMIC	3. 9PF	0% 50V	
, pelay			C124	1-162-281-3	CERAMIC	91PF :	0% 50V	
< RELAY >			C125	1-162-285-3	CERAMIC	180PF	0% 50V	
RY801 1-515-501-00 RELAY			C126	1-162-294-3	I CERAMIC (	0. 001uF	10% 50V	
	100 (00) (00)	. V.C.D.\	C127	1-162-294-3			10% 50V	
TM601 1-537-314-21 TERMINAL BC	JARD (SP) (SPE	AKEK)	C128	1-162-294-3	CERAMIC	0.001uF	10% 50V	
**********		*******	C129	1-162-207-3			5% 50V	
		*****	C130	1-162-294-3	1 CERAMIC	0.001uF	10% 50V	
1-638-675-11 POWER BOAR			C131	1-162-294-3			10% 50V	
******	•		C132	1-101-886-0			5% 50V	
A-4341-444-A RF BOARD. (	COMPLETE		C133	1-162-194-3			10% 50V	
1-638-676-11 TRANSFORME			C134	1-161-494-0		0. 022uF	25V	
1-638-677-11 TRANSFORME			C135	1-126-157-1	I ELECT	10uF	20% 16V	
1-638-678-11 TRANSFORME			0100	1 104 400 1	1 ELECT	470uF	20% 25V	
1-638-679-11 LED BOARD			C136 C137	1-124-480-1 1-161-494-0		0. 022uF	25V 25V	
			C137	1-124-465-0			20% 50V	
			C139	1-124-465-0	O ELECI	0. 47uF	20% 50V	

TRANSFORMER C LED

		- L				L				
Ref. N		Description			Remark	Ref. No.	Part No.	Description		Remark
C140	1-162-294-31		0. 001uF	10%	50V			< CONNECTOR >		
C141	1-164-027-11		22PF	5%	50V			COMMECTOR		
C142	1-164-056-11		27PF	5%	50V	CNP101 *	1-564-506-11	PLUG, CONNECTO	D 3D	
C143	1-164-035-11		47PF	5%	50V			PLUG, CONNECTO		
C144	1-161-379-00		0. 01uF	20%	25V			PIN. CONNECTOR		
• • • • • • • • • • • • • • • • • • • •	. 101 070 00	O L II MINI O	0. 0101	207	201					
C145	1-161-494-00	CERAMIC	0. 022uF		25V	CMF3UZ #	1-304-321-00	PIN, CONNECTOR	24	
C146	1-161-494-00		0. 022uF		25V	CNDOOSA	1 564 221 00	DIN CONNECTOR	0.0	
C147	1-161-494-00		0. 022uF		25V			PIN, CONNECTOR		
C148	1-161-494-00		0. 022uF		25V 25V	CMLACOR	1-309-301-11	PIN. CONNECTOR	br	
C149	1-162-294-31		0. 022ur	1.0%	50V	CNDOOA	1 500 400 11	DIN CONVECTOR	4 D	
0110	1 102 204 01	CENTAITO	0. 00101	10/4	304	UNIT 304 +	1-303-433-11	PIN, CONNECTOR	37	
C150	1-162-294-31	CFRAMIC	0.001uF	10%	50V	CNS901	1-560-400-11	SOCKET, CONNEC	TAD 2D	
C151	1-161-494-00		0. 022uF	1070	25V			SOCKET, CONNEC		
C152	1-124-443-00		100uF	2.0%	107			SOCKET, CONNEC		
C153	1-126-157-11		10uF		16V	0110304 7	1 301 031 - 00	SOURLI, COMMEC	ION II	
C154	1-161-494-00		0. 022uF		25V			< TRIMMER >		
			******		200			\ INTHINEN >		
C155	1-130-483-00	MYLAR	0. 01uF	5%	50V	CT101	1-141-298-11	CAP. TRIMMER		
C156	1-162-294-31	CERAMIC	0.001uF	10%			1-141-298-11			
C157	1-124-480-11	ELECT	470uF		25V		1-141-298-11			
C158	1-161-494-00	CERAMIC	0. 022uF		25V		1-141-298-11			
C159	1-126-301-11	ELECT	1uF	20%	50V			,		
								< DIODE >		
C160	1-126-157-11		10uF	20%	16V					
C161	1-126-157-11		10uF	20%	16V	D101	8-719-949-57	DIODE 1T32-4		
C162	1-126-157-11		10uF	20%	16V	D102	8-719-949-57	DIODE 1T32-4		
C163	1-126-157-11		10uF	20%	16V	D103	8-719-949-57	D10DE 1T32-4		
C164	1-161-494-00	CERAMIC	0. 022uF		25V		8-719-200-02			
0405						D902	8-719-200-02	DIODE 10E2		
C165	1-161-494-00		0. 022uF		25V					
C166	1-161-379-00		0.01uF	20%	25V	D903	8-719-200-02	DIODE 10E2		
C901	<b>★</b> 1-161-744-00		0.01uF		400V	D904	8-719-200-02	DIODE 10E2		
C902	1-130-483-00		0.01uF	5%	50 V		8-719-200-02			
C903	1-130-483-00	MYLAR	0.01uF	5%	.50V		8-719-200-02			
0004	4 404 500 44	F1 FAT				D907	8-719-200-02	DIODE 10E2		
C904	1-124-563-11		2200uF	20%						
C905	1-130-483-00		0. 01uF	5%	50V	I	8-719-200-02			
C906	1-124-477-11		47uF	20%			8-719-912-20			
C907	1-164-095-11		0.01uF	10%				DIODE RBA-402		
C908	1-126-157-11	ELECT	10uF	20%	16V	D911	8-719-301-39	LED SEL2210S-D	(POWER)	
C909	1-126-157-11	FLECT	10uF	2.08/	161/					
C910	1-164-095-11		0. 01uF	20%				< 10 >		
C911	1-130-483-00		0. 01uF	10% 5%	16V 50V	10101	0 350 403 63	10 0040540		
C912	1-130-483-00		0. 01uF	5%	50V		8-759-107-67			
C924	1-130-483-00		0. 01uF	5%	50 V		8-759-801-81			
***	1 100 400 00	mi LAN	0. 0141	378	304		8-759-916-12			
C925	1-130-483-00	MYLAR	0. 01uF	5%	50V	10104	8-759-107-67	10 uPC1651G		
C928	1-164-095-11		0. 01uF	10%		IC105	8-752-031-84	IC CXATT25P		
C929	1-164-095-11		0. 01uF	10%		10106	0_750_000 50	10 T477000		
C931	1-161-379-00		0. 01uF	20%		10107	8-759-209-50	IC TATTOZA		
			vi v i u i	2 0 /0	201	IC107	0-109-911-18	IC SN74HCUO4N		
						10109	0-133-208-06	IC TC4051BPHB		
						1	8-759-604-29			
						10110	8-759-982-21	IC KC/8LU5A		
						10901 8	8-759-604-30	IC MSE79001		
						10902	3-759-820-84	IC IZBNDUE		
								I LIOMINUJ		

TRANSFORMER B

**POWER** 

RF

TRANSFORMER A

### Note:

Note:
The components identified by mark A or dotted line with mark are critical for safety.
Replace only with part number specified.

### Note:

Les composants identifiés par une marque A sont critiques pour la sécurité.

Ne les remplacer que par une pièce portant le numéro spécifié.

OWER	RF TR	ANSFO	RMER A	T	RANSFO	RMER	B	RANS	FORME	R C L	ED		
	Part No.	Description			Remark	Ref. No.	Part N		Description			Rema	
		< COIL >	•			R129			CARBON	1M	5%	1/4W	
						R130	1-249-	411-11	CARBON	330	5%	1/4W	
L101	1-410-324-11	LNDUCTOR	4. 7uH			R131	1-249-	421-11	CARBON	2.2K	5%	1/4W	
L102	1-410-324-11		4. 7uH			R132			CARBON	220	5%	1/4W	
L102	1-460-115-11					R133			CARBON	22K	5%	1/4W	
L103	1-460-115-11	•											
L105	1-460-116-11					R134	1-249-	433-11	CARBON	22K	5%	1/4W	
L103	1-400-110-11	COIL (MIIII	OUNLY			R135			CARBON	18K	5%	1/4W	
L106	1-410-324-11	INDUCTOR	4. 7uH			R136			CARBON	22K	5%	1/4W	
L107	1-410-324-11		4. 7uH			R137			CARBON	100K	5%	1/4W	
	1-410-513-11		22 uH			R138			CARBON	100K	5%	1/4W	
L108	1-410-324-11		4. 7uH			1 1100	1 210		• • • • • • • • • • • • • • • • • • • •				
L109	1-410-524-11		4. 7 d ll			R139	1-249-	441-11	CARBON	100K	5%	1/4W	
L110	1-410-324-11		4. 7uH			R140			CARBON	10K	5%	1/4W	
L111	1-410-324-11	INDUCTOR	4. 1 011			R141			CARBON	10K	5%	1/4W	
		Z TRANCICTO	<b>ND N</b>			R142			CARBON	1 K	5%	1/4W	
		< TRANSISTO	)			R143			CARBON	10K	5%	1/4W	
	0 700 000 45	TRANSISTAR	00004E0 VOD			1 1143	1-243	423 11	VAIIDOR	101	070	1, 111	
0101	8-729-230-45					R144	1_2/0_	.417_11	CARBON	1 K	5%	1/4W	
0102	8-729-900-80					R145			CARBON	47	5%	1/4W	
0103	8-729-900-80					R146			CARBON	10	5%	1/4W	
Q901	8-729-900-80	IKANSISIUK	D16114E3			R901			CARBON	47	5%	1/4W	
						R902			CARBON	330	5%	1/4W	
		< RESISTOR	>			N9UZ	1-249-	411-11	CANDON	300	070	17 411	
R1	1-202-725-00	SOLID	3. 3M	10%	1/2W				FUSIBLE	1	5%	1/2W	
R101	1-249-393-11	CARBON	10	5%	1/4W	R904	<u> 1-212-</u>	-934-00	FUSIBLE	1	5%	1/2W	F
R102	1-249-393-11	CARBON	10	5%	1/4W	İ							
R103	1-249-405-11	CARBON	100	5%	1/4W				< ENCAPSUL	ATED COMPON	IENT >		
R104	1-249-429-11	CARBON	10 K	5%	1/4W					50 001/D01/51			
						RF101			ENCAPSULAT				
R105	1-247-874-11	CARBON	62K	5%	1/4W	RF102	1-236-	-995-11	ENCAPSULAT	ED COMPONEN	11		
R106	1-249-401-11	CARBON	47	5%	1/4W								
R107	1-247-903-00	CARBON	1M	5%	1/4W	1			< VARIABLE	RESISTOR >	•		
R108	1-249-405-11	CARBON	100	5%	1/4W	1							
R109	1-249-389-11	CARBON	4. 7	5%	1/4W	RV101	1-238-	-016-11	RES. ADJ.	CARBON 10K	(CONTRO	L VOLTA	.GE
						RV102	1-238-	-016-11	RES. ADJ.	CARBON 10K	(CONTRO	L VOLTA	,GE
R110	1-249-441-11	CARBON	100K	5%	1/4W	RV103	1-238	-016-11	RES, ADJ,	CARBON 10K	(CONTRO	L VOLTA	GE
R111	1-249-437-11	CARBON	47K	5%	1/4W								
R112	1-249-441-11	CARBON	100K	5%	1/4W				< RELAY >				
R113	1-249-401-11	CARBON	47	5%	1/4W								
R114	1-249-389-11	CARBON	4. 7	5%	1/4W	RY901	1-515	-701-11	RELAY				
D115	1-249-401-11	CADDON	47	5%	1/4W	İ			< TRANSFOR	MFR >			
R115	1-249-394-11		12	5%	1/6W								
R116			270	5%	1/4W	T1	A 1_450	_320_1	TRANSFORME	R POWER			
R117	1-249-410-11		100K		1/4W	T101			TRANSFORM		INATOR		
R118	1-249-441-11			5% 5%	1/4W	1101	1-404	-340-1	INMISTORM	in, Dioonim	MAION		
R119	1-249-421-11	CARBON	2. 2K	376	1/411				< CONNECTO	)R >			
R120	1-247-887-00	CARBON	220K	5%	1/4W								
R121	1-249-415-11	CARBON	680	5%	1/4W	TP1			1 PLUG, CONI				
R122	1-249-413-11		470	5%	1/4W	TP2	* 1-564	-505-1	1 PLUG. CON	NECTOR 2P			
R123	1-249-417-11		1 K	5%	1/4W	TP3			1 PLUG, CONI				
R124	1-249-411-11		330	5%	1/4W	TP4			1 PLUG, CON				
D465	4 0 40 400 4		404	Es/	1 / 414	TP5	<b>*</b> 1−564	-505-1	1 PLUG. CON	NECTOR 2P			
R125	1-249-429-1		10K	5%	1/4W	1							
R126	1-249-429-1		10K	5%	1/4W								
R127	1-249-393-1		10 22	5% 5%	1/4W 1/4W	1							
R128	1-249-397-1												

Note:
The components identified by mark A or dotted line with mark are critical for safety.
Replace only with part number specified.

Note:
Les composants identifies par une marque A sont critiques pour la sécurite.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS **********	
F901	1-575-975-11 1-532-746-11 1-450-321-11	CORD. POWER FUSE, GLASS TUBE TRANSFORMER, POWER	
******	******	***********	******
		ACCESSORY & PACKING MATERIAL	

- \* 3-704-343-01 SHEET (STANDARD), PROTECTION
- \* 4-943-055-01 CUSHION

### \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* HARDWARE LIST

#	1	7-682-547-09	SCREW	+BVTT	3 X 6	(8)	
#	2	7-682-548-04	SCREW	+BVTT	3 X 8	<b>(S)</b>	
#	3	7-685-646-79	SCREW	+BVTP	3 X 8	TYPE2	N-S
#	4	7-685-870-01	SCREW	+BVTT	3 X 5	(S)	
#	5	7-682-560-04	SCREW	+BVTT	4X6	(S)	
#	6	7-682-550-04	SCREW	+BVTT	3X12	(S)	
#	7	7-685-647-79	SCREW	+BVTP	3X10	TYPE2	N-S

Note:
The components identified by mark A or dotted line with mark are critical for safety.
Replace only with part number specified.

### Note:

Les composants identifiés par une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spéci-fié.

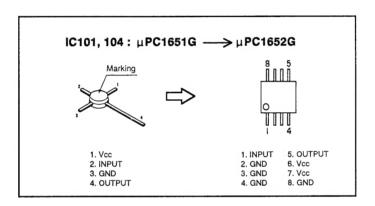
# TA-DL100

# SONY. SERVICE MANUAL

US Model Canadian Model

### **SUPPLEMENT-1**

File this Supplement with the Service Manual.

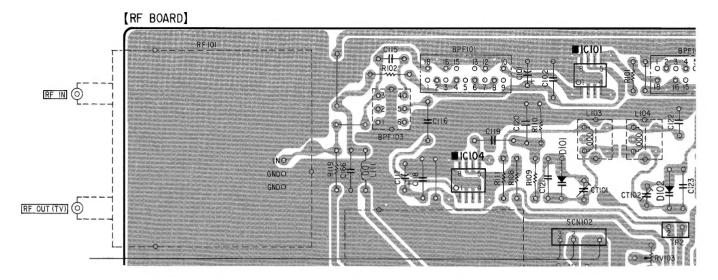


• CHANGED PARTS LIST (Service Manual See page 35)

Ref. No.	Parts No.	Des	cription	Re
IC101	8-759-154-38	IC	μPC1652G	
IC104	8-759-154-38	IC	ս PC1652G	

- PRINTED WIRING BOARDS (Service Manual See page 19)
- SCHEMATIC DIAGRAM (Service Manual See page 25)

### • PRINTED WIRING BOARDS (Service Manual See page 19)



### • SCHEMATIC DIAGRAM (Service Manual See page 25)

